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JULY 1991

# FOOD ENGINEERING

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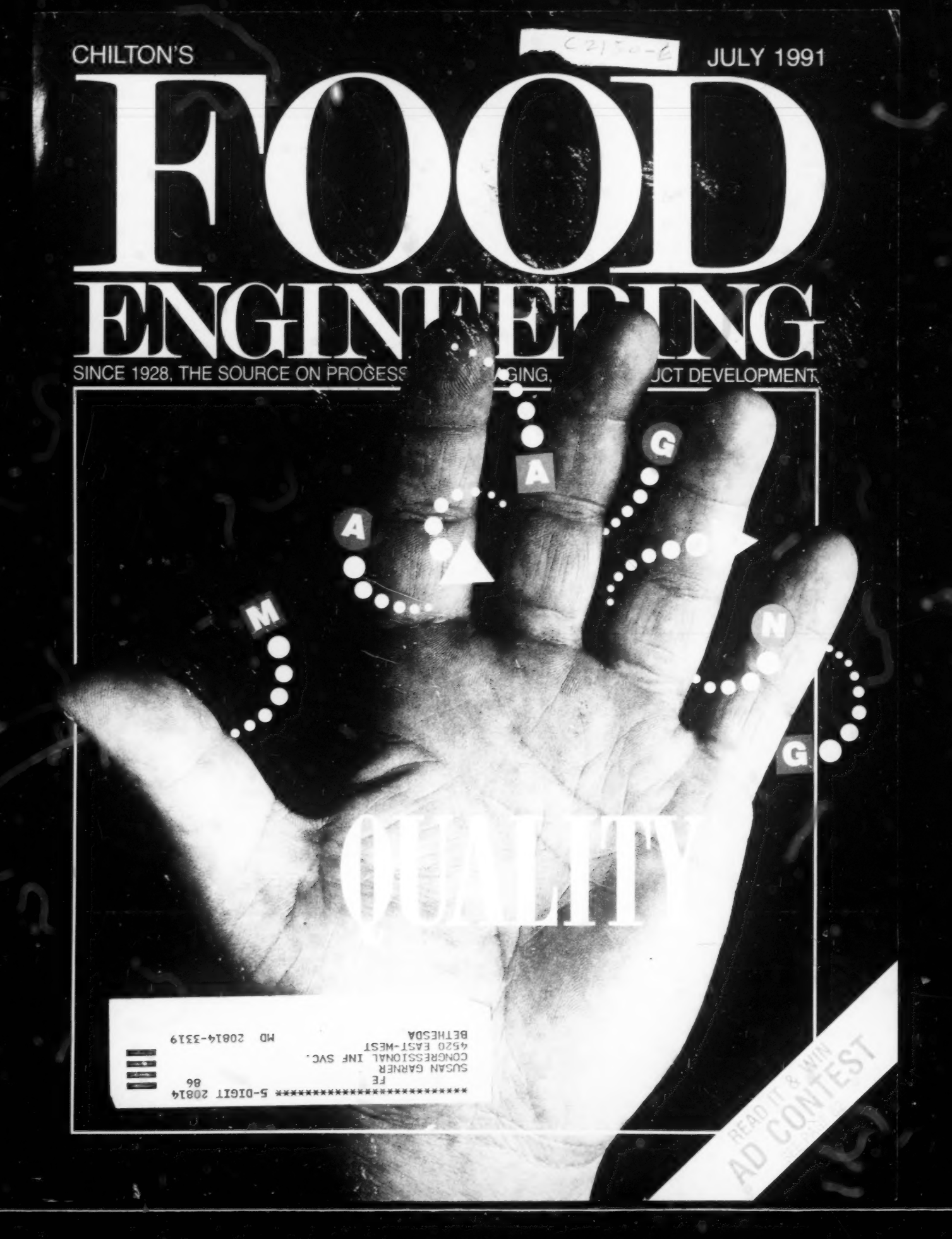


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READ IT & WIN
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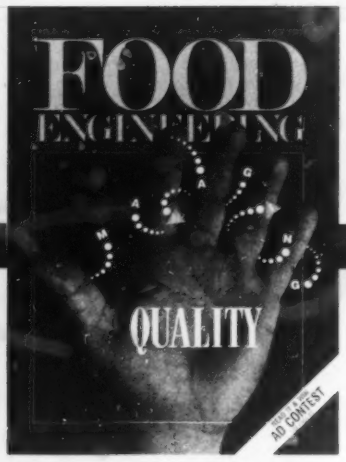
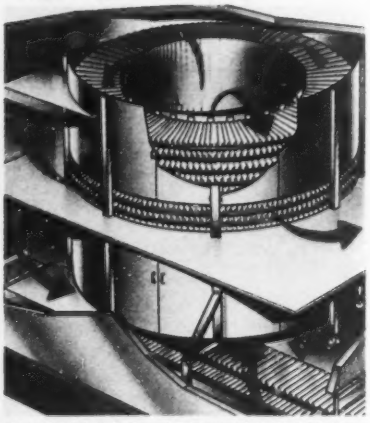
# FOOD ENGINEERING




## ABOUT THE COVER

Despite major advances in automation, quality management, at its core, remains in the hands of people. In progressive companies, all hands participate in quality management, not just those in the QC department.

**PAGES 55 TO 58**



## SPECIAL EMPHASIS

**PAGES 61 TO 63**

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AD CONTEST: **PAGE 82**

## ENGINEERED FOODS

**20 Looking to Tomorrow at Food Labs '91**
The conference focused on issues facing the laboratory of today and tomorrow, including computerization, the "fast-factory," globalization and food safety.

**24 Marketplace—Processed Meat's Image**
Long spurned for its fat and salt content, processed meat is coming into its own as a light and healthy food.

**29 The Next Wave for QA/QC**
Labs deploy sophisticated instruments to determine contaminants, but need finely-tuned diagnostic skills to solve continuing contamination problems.

**29 Labs Need Smarter, Simpler Methods**
It's up to the scientists to develop methods that reduce sample preparation time and simplify procedures.

**34 Choices—Superwomen Resigns**
Women's changing aspirations mandate different marketing messages and new promise from foods.

## FOOD PACKAGING

**42 The Big Easy Hosts Pack Alimentaire**
Light attendance at show reflects unstable economic times and extensive travel restrictions.

**44 Package Protector Reduces Bulk, Cost**
Scotchban Protector, a barrier that protects a package, is not a film or coating but a treatment of paper fibers.

**44 Industry Gets Its Turn to Talk**
Survey indicates how industry continues to respond to the American consumer's concern for the environment.

45 **On-line Detection System for MAP**
A new method of detection was introduced to eliminate defective modified atmosphere packages.

## FEATURES

55 **Get a Grip on Quality**
Quality has grown from being the exclusive enclave of the QC staff to being a top priority for all hands. Quality is needed from procurement through shipment.

61 **Forging New Links in the Cold Chain**
Recent developments aim at extending the shelf life of refrigerated products and at freezing products faster while reducing dehydration loss.

64 **Food Plants '91: Maximize Assets**
Food Plants '91, the annual meeting of food plant engineering and manufacturing business, will explore whether to renovate old plants or build new ones.

## PROCESSING & CONTROL

70 **Unilever Moves Toward Open CIM**
Unilever, the world's third largest food processor, is moving toward computer-integrated manufacturing based on open architecture to integrate its far-flung operations.

72 **Unilever Unit Automates Operations**
Unilever subsidiary Van den Berghs & Jurgens has integrated scheduling with planning, materials management and production reporting.

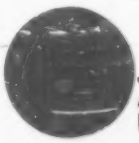
74 **Online—CIM: a Concept, Not an Action**
Companies don't "implement" CIM, they install the functionality that makes CIM a reality.

## DEPARTMENTS

9 **Editorial**
10 **Calendar**
13 **Industry Report**
94 **New In Print**
97 **People**
98 **Classified Ads**
112 **The Final Analysis**

## NEW PRODUCTS

85 **Handling & Distribution**
90 **Sanitation & Maintenance**



JESSE H. NEAL AWARD-WINNING EDITORS

**Publisher of Food Engineering Master Catalog and Food Engineering International**
**Co-sponsor of Food Plants '91**
**Co-sponsor of Food Labs '91**

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The tray is now in the marketplace being used by a "major food processor" and has undergone extensive organoleptic testing. Therma-Plate is considering further applications for the tray such as shelf stable entrees (it has been tested during retorting) and chilled entrees.

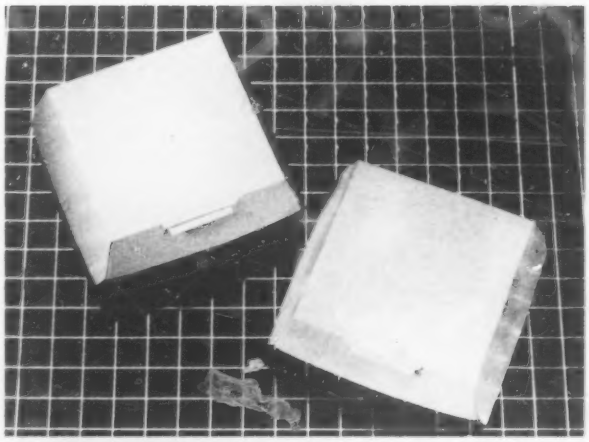
See additional highlights of the show on this page and the next.

*Therma-Plate Corporation, 126 Corporate Boulevard, South Plainfield, NJ 07080 or circle* 251. ▲

## Package protector meets source reduction goals

The 3M Company showcased its line of *Scotchban Protector* products at Pack Alimentaire '91. Scotchban Protector, a barrier that protects the appearance of a package, is not a film or coating, according to the company, but a treatment on individual paper fibers that does not seal the paper pores.

Scotchban Protector is a fluorochemical and not a CFC. It does not affect the ozone layer and complies with FDA regulations for direct food contact. By using this protective layer on paper and paperboard as an alternative to polystyrene, film or foil laminates, manufacturers can substantially reduce the bulk and cost of packaging substrates.



**▲ A new Scotchban Protector now offers packagers protection against grease, oil, and water with no affect on recyclability. (Source: 3M Company.)**

The company's *FC-807* product protects packages against grease and oil. A new product, *FX-845*, introduced at the show, protects packages against grease, oil, and water and can help companies meet their source reduction goals since the protective layers do not interfere with the recyclability or degradability of paper or paperboard. Applications for the Scotchban Protector include cookies, crackers, popcorn, and other varieties of snack food.

*3M Company, Building 301-1E-03, 3M Center, St. Paul, MN 55144-1000*
**Circle 252**

## Industry gets its turn to talk

At Pack Alimentaire '91, Stewart Mosberg, senior director of client service at Walker Dorwin Teague Associates, Inc., released the results of a survey which indicated how industry continues to respond to the American consumer's concern for the environment. Conducted by the Gallup Organization at the end of 1990, (another study had been completed in 1989), the firm interviewed a random sample of 100 managers of Fortune 500 companies who are responsible for packaging consumer products; 13 percent of the companies were from food and related industries.

The majority of respondents to the survey reported that they had either introduced or planned to introduce environmentally-friendly packaging of the products under their control. Besides helping the environment, the most common reasons for introducing "green" packaging were consumer and legislative pressure. Although cost was seen as the major deterrent for using environmentally-friendly packaging, most respondents felt that the

**Orics Industries introduced a line of vacuum gas flush sealing machines at the recent Pack Alimentaire expo, the *SLS-VGF* series. The machines provide controlled sealing solutions for modified atmosphere packaging (MAP). The machines' advanced control systems and floating heat-sealing heads provide an excellent seal even on a difficult sealing medium such as a CPET preformed tray.**

**The fully automatic models are equipped with a microprocessor controller and an optical cam switching device. Less than one percent oxygen residual inside the package can be consistently achieved. Each heat seal head in this series is equipped with a resistance temperature detector.**

*Orics Industries Inc., P.O. Box 6807, Flushing, NY 11365*
**Circle 259**

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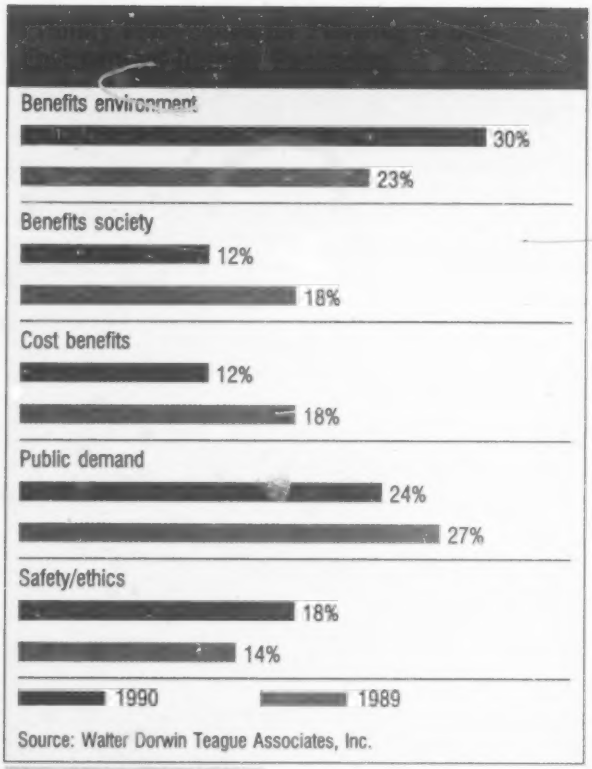


**▲ Public demand and helping the environment are the two major reasons manufacturers will continue to introduce green packaging.**

consumer would be willing to pay the extra cost involved.

The poll also indicated that the American public's increasing interest in enhancing and preserving the environment continues to significantly impact the manufacturing and packaging industries, and is, without question, influencing the use of environmentally-friendly packaging.

*Walter Dorwin Teague Associates, Inc., 95 Madison Avenue, New York, NY 10157* **Circle 253**

## On-line detection system for MAP

Designed to eliminate defective modified atmosphere packages on-line, a new method of detection was introduced at Pack Alimentaire '91 by Liquid Air Corporation. The fully-automated system is an accurate method to ensure leak-free products and can detect leaks as small as 2.5 microns in diameter, the normal size of bacteria.

In order for the system to work, a small gaseous headspace is required, usually one that is one percent of the total volume of the package. In a carbon dioxide/nitrogen mix, the nitrogen is replaced with a small portion of helium as a tracer gas in very low proportions. The helium is detected through a sensor which indicates if there is a leak in the container or the lidding material. The system can achieve line speeds of 30 to 45 packages per minute.

The equipment for the detection system can be leased; the company owns the patent and can supply gas mixtures with helium to use with it.

*Liquid Air Corporation, 2121 North California Boulevard, Suite 350, Walnut Creek, CA 94596* **Circle 255**

## Trays slated for retort or shelf stable use

Thermoformed from a unique rollstock composed of polyester and nylon, MCP Performance Plastics' *CPET-Barrier* trays were showcased at Pack Alimentaire. The trays have high heat resistance and a high oxygen barrier property providing a long shelf life (six to 12 months). The trays are dual ovenable, recyclable, and are ideal for retort and shelf stable applications.

*MCP Performance Plastics, P.O. Box 542, Janesville, WI 53547* **Circle 260**

**A new grade of *Valox* resin was exhibited by GE Plastics at Pack Alimentaire that is currently being used by Alma S.A., a Swiss packaging company, for use on its new *P'tit Louis* one-portion soft cheese pack.**

***Valox PKG 1530* resin is a semi-crystalline engineering thermoplastic developed for direct coextrusion with high impact polystyrene (HIPS) without a tie layer. While the HIPS layer provides strength and easy thermoforming, Valox resin withstands 400°F heat sealing temperatures and is unaffected by oils and dairy fats.**

**The package provides a cost effective alternative to portion cups with aluminum lidding which Switzerland considers harmful to the environment. Alma thermoforms and seals the pack, leaving the neck open for the hot filling process. When the cheese cools, the neck is sealed. The easy-to-open pack shows good peelability and tear resistance.**

*GE Plastics, PR #39-91, One Plastics Avenue, Pittsfield, MA 01201* **Circle 258**